UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,799	01/07/2002	Leonard E. Frey	END920010075US1	2893

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ART UNIT	PAPER NUMBER
2166	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 June 2009*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on *07 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Response filed on 6/1/2009

1.   Claims 1-19 pending in this application.

2.   Examiner acknowledges applicant's response filed on 6/1/2009.

3.   A request for continued examination under 37 CFR 1.114 was filed in this

application after a decision by the Board of Patent Appeals and Interferences mailed on

12/17/2008, but before the filing of a Notice of Appeal to the Court of Appeals for the

Federal Circuit or the commencement of a civil action. Since this application is eligible

for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and

prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 2/11/2009 has been entered.

4.   Claims 1,8,15 have been amended [2/11/2009].

Drawings

5.   The drawings filed on 1/7/2002 are <u>accepted</u> for examination purpose, however,.

Information Disclosure Statement

6.   The information disclosure statement filed on 1/7/2002, is in compliance with the

provisions of 37 CFR 1.97 has been considered and a copy was enclosed with the

office action, mailed on 5/10/2004.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

7.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

8.   *Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable*

over Brodersen et al., [hereafter Brodersen], US Patent No. 6405220 filed on

July 6,2001 in view of Raz, US Patent No. 6292827

9.   As to Claims 1,8,15, Brodersen teaches a system which including 'processing

transactions' [col 3, line 5-11], processing transactions corresponds to transactions

entering into transaction log, creating transaction files to other workgroup user clients as

detailed in col 3, line 5-11;

'providing a plurality of processing databases including at least one relational

database and one sequential database and one spreadsheet database each of said

processing databases having a respective agent' [fig 1, fig 9, col 15, line 27-36], plurality

of processing databases corresponds to fig 1, fig 9, elements 3, 23a-23c, 305 and their

respective agent corresponds to fig 9, element 315; including at least one relational

database corresponds to Brodersen's fig 9, element 3 master database because

Broderson specifically teaches not only database management system particularly

supporting "transaction processes against database" including updating the transactions

into master database as detailed in col 4, line 41-46;

'providing a transaction database' [col 15, line 37-43, line 58-65], transaction

database corresponds to transactions in the transaction log as detailed in col 15, line

58-65

'writing one or more transactions, each having included therein a key and a

detail, from a first of said plurality of processing databases to said transaction database'

[col 10, line 8-13, line 59-64] Brodersen specifically teaches writing transaction log to

nodes, particularly function of log on a node is to record a transaction for propagation to

central system as detailed in col 10, line 8-13;;

'periodically searching, using a processing agent from a second of said plurality

of processing databases' [col 16, line 5-11], Brodersen specifically teaches multi-user

docking clients that allows processing data between multiple user databases and

master database as detailed in col 16, line 5-11; 'transaction database for a key and

detail to determine whether said processing agent should process said one or more

transactions' [col 16, line 21-26] Brodersen specifically teaches creating transaction in

local database, entering the transaction into transaction log and processing transactions

as detailed in col 16, line 21-26;

'updating a record in said second of said plurality of processing databases, by

using said key and detail' [col 16, line 37-40], Brodersen specifically teaches transaction

log entries are copies on the master database and updating the transaction into master

database as detailed in col 16, line 37-40.

It is however, noted that Brodersen does not specifically teach 'databases of

plurality of types', plurality of databases having a different type than said first of said

plurality of databases', although Brodersen teaches distributed transactional databases

that allows multiple workgroup user clients, updating transaction log or files between

headquarter master database and workgroup database as detailed in fig 9, col 15, line

15-26 . On the other hand, Raz specifically teaches 'databases of plurality of types'

[col 9, line 31-35], databases plurality of types corresponds to Raz's RDBMS and non-

RDBMS as detailed in col 9, line 31-35; 'plurality of databases having a different type

than said first of said plurality of databases' [fig 4,col 7, line 52-54, col 9, line 31-35],

different type of databases corresponds to relational databases and non-relational

databases because JDBC supports open data base connection and a standard way of

interfacing with different types of databases as detailed in col 7, line 52-54.

furthermore, Raz specifically supports atleast multiple databases having different types

such as "oracle", "lotus" [fig 4, fig 5C, element 22].

It would have been obvious to one of the ordinary skill in the art at the time of

applicant's invention to incorporate the teachings of Raz into Brodersen et al. because

both Raz, Brodersen are directed to distributed databases, more specifically Brodersen

is directed to database management system including master database server and work

group user client databases, creating transaction files and updating the transaction into

workgroup databases [fig 9, Abstract], while Raz is directed to dynamically distribution

of data and management of information, more specifically, dynamically re-distributing

data between data servers and clients [see Abstract, col 3, line 28-35].

One of the ordinary skill in the art at the time of applicant's invention would have

been motivated to combine the references because that would have allowed users of

Brodersen et al. to use Raz's "open data base connection or "ODBC" protocol that

establishes a standard way of interfacing with different types of databases [Raz: col 7,

line 52-54], more specifically connecting both relational database and non-relational

database that permits an exchange of information between client and server databases,

furthermore dynamically controls the location, access and transfer of information

between client and servers in a network system as suggested by Raz [col 1, line 55-67],

also would have been obvious to substitute and/or connect atleast multiple databases of

different types such as "oracle", "lotus" [Raz: fig 4, fig 5C, element 22], to achieve the

predictable results of "processing multiple transactions from different databases",

bringing the advantages of reliable network for information or database transactional

information, and improving the performance of the dynamic distribution information

[col 1, line 34-36].

10.   As to Claim 2,9,16, Brodersen teaches a system which including 'transaction

database is a messaging database' [col 5, line 8-15, fig 1].

11.   As to Claim 4, 11,18, Brodersen teaches a system which including 'one or more

transactions has a processor designation specifying which of said plurality of processing

databases is affected by said each of said one or more transactions' [col 5, line 18-26,

line 49-55].

12.   As to Claims 6,13, Brodersen teaches a system which including 'transferring said

one or more transactions from said transaction database to said second of said plurality

of processing databases prior to said step of updating a record' [col 8, line 51-67, col 9,

line 1-4, col 10, line 37-50]

13.   As to Claims 7,14,19, Brodersen teaches a system which including 'setting a

status flag in said one or more transactions' [col 11, line 1-17].

14.   As to Claim 3, 10, Raz teaches a system which including 'transaction database,

is a LOTUS NOTES database and said plurality of processing databases are adapted to

read said LOTUS NOTES database' [fig 4, col 8, line 39-42].

15.   As to Claim 5, 12, 17, Brodersen disclosed 'key includes a wildcard character'

[col 16, line 62-67].

Response to Arguments

16.   Applicant's arguments filed on 6/1/2009 with respect to claims 1-19 have been

fully considered but they are not persuasive, for examiner's response, see discussion

below:

a)   At page 8, Applicant argues that "Applicants subsequently amended independent

claims 1,8, and 15 in response to the Appeal Decision dated 12/17/2009 to specifically

require the respective agent to be included in each of said processing databases, a

recitation fully supported by Applicants' specification. Such amending has overcome

the Board's interpretation of the claim term "having" to mean "being associated with".

Brodersen's agent or program may be associated with the database, but it is not

described as included in the database

The examiner states in his response to arguments of 3/3/2009 that the amended claims would have been obvious under 35 USC 103(a) Brodersen in view of Raz. Applicants disagree. First of all Brodersen does not describe, but <u>merely suggests that each of the plurality of databases has an agent</u> because a skilled artisan would understand that an "agent" associated with the databases performs certain functions. The Board did not find that the skilled artisan would also known that the agent must be included in the database and in fact had to interpret Applicants' "having" claim term to mean "associated with" in order to find obviousness. Applicants' amended claims are therefore not obvious, otherwise the Board would not need to interpret "having" as "associated with". Applicants' independent claims 1,8, and 15 are allowable for this reason alone.

As to the above argument [a], Examiner acknowledges applicant's amendment to claims 1,8,15, as filed with RCE filed on 2/11/2009 and issued non final office action on 3/3/2009. Further, examiner also considered Board's interpretation of the claim term "having"..., its ordinary meaning of "being associated with" [Board's opinion page 11, dated 12/17/2008], also, Board clearly agreed with Examiners' 35 USC 103(a) combined teachings of Brodersen in view of Raz [Board's decision: page 11]. It is however, noted that Board's opinion did not specifically suggests any limitation to overcome 35 USC 103(a) particularly Brodersen in view of Raz rejection. As best understood by the examiner and in view of Board's decision, prior art still teaches databases including respective <u>agent</u> [see Board's decision: page 11, line 11-14, office

action: page 4] also applicant agreed that Bordersen does <u>suggests</u> the same

[applicant's remarks: page 8, 22-23].

Therefore, one of ordinary skill in the art would have combined the teaching of

Brodersen in view Raz at the least suggests "providing a plurality of processing

databases of a plurality of…………..having a respective agent included therein"

b)   At page 9, claims 1,8,15, applicant argues that "In the previous amendment,

Applicants have also amended independent claims 1,8, and 15 to require the key and

detail to be included within each of the one or more transactions. The Examiner cited

Brodersen's writing a transaction log to nodes. The <u>Board agreed</u> <u>that the combined</u>

<u>teachings of Brodersen and Raz</u> would disclose or at least suggest updating a record in

said second of said plurality of processing databases by using said key and detail. The

Board also found that the skilled artisan would have understood that the key and detail

included in the databases in Brodersen are used in the updating of the databases.

However, claims 1,8,15 now require that there be a key and detail included in each

transaction. The combination of Brodersen and Raz does not teach or suggest this

requirement.

As to the above argument [b], Brodersen specifically teaches writing transaction

log to nodes , each log record including specific identification " key" with respect to

identification of table is part of updating database, further function of log on a node is to

record a transaction for propagation to central system as detailed in col 10, line 8-13,

line 59-64, therefore, one of ordinary skill in the art would have understood each of the

transactions in the transaction log files represented in the form of transaction tables is

part of database as taught by Brodersen, to include key and detail [see Board's

decision: page 11-12]. Hence, Applicant's remarks are deemed not to be persuasive

and claims 1-19 stand rejected under 35 USC 103(a) as being unpatentable over

Brodersen in view of Raz.

Conclusion

The prior art made of record

a.   US Patent.No.   6405220

b.   US Patent No.   6292827

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Srirama Channavajjala whose telephone number is

571-272-4108.   The examiner can normally be reached on Monday-Friday from

8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone

numbers for the organization where the application or proceeding is assigned is

571-273-8300 Information regarding the status of an application may be obtained

from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free)

/Srirama Channavajjala/
Primary Examiner, Art Unit 2166